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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/543,019	12/22/2005	Norishige Kawaguchi	501/43589/Case 102-PCT-US	3950
279 7590 06/22/2010 TREXLER, BUSHNELL, GIANGIORGI, BLACKSTONE & MARR, LTD. 105 WEST ADAMS STREET SUITE 3600 CHICAGO, IL 60603			EXAMINER COHEN, JODI F	
			ART UNIT 1791	PAPER NUMBER
			NOTIFICATION DATE 06/22/2010	DELIVERY MODE ELECTRONIC

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/543,019  
Filing Date: December 22, 2005  
Appellant(s): KAWAGUCHI ET AL.

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James R. Foley  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 04/16/2010 appealing from the Office action mailed 11/16/2009.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 1-4 rejected.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

**(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

**(8) Evidence Relied Upon**

JP11-106570	Yamamoto	4-1999
US6596198	Semen	7-2003

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto JP 11-106570- as cited in the provided machine translation and further in view of Semen (US 6596198).

Regarding claims 1-4, Yamamoto discloses a method for manufacturing a polyolefin-polyamide resin composition [0006]-[0007], comprising melting and kneading, extruding, and drafted drawing or rolling fibers and further pelletizing the fibers with a fiber diameter of 1 micrometer or less by cooling [0017]-[0020]. The resin composition

Art Unit: 1791

comprising a polyolefin such as polyethylene [0008], a polyamide that can have an amido group in the main chain and a melting point of 160-265 °C [0011], and a silane coupling agent [0013]-[0014]. Yamamoto also discloses adding organic peroxide but does not disclose adding a first antioxidant with a melting point of 70-170 °C, and a second antioxidant with a melting point of 180-300 °C.

Semen teaches manufacturing a polyolefin polymer comprising melting kneading and pelletizing by cooling a polymer. Additionally, a stabilizer additive is added to the polyolefin polymer in order to protect against polymer discoloration and thermooxidative degradation (Col 3; lines 12-20), wherein the additive comprises a first hindered phenol antioxidant with a melting point above 100 degrees Celsius and a secondary phosphate antioxidant. Semen lists a series of exemplary first antioxidants including melting points ranging from 94, 154, 128-132, 93-108, 76-79, 161-163, 110-125, 155-159, 50-55, 218-224, and 63 degrees Celsius (Col 4; line 10-Col 14-line 53). Thus only three of the exemplary first antioxidants fall outside of the range claimed in the present application of 70-170 degrees Celsius. The exemplary secondary antioxidants listed include melting points ranging from up to 200, 183-188, 200-205, 320-33, and 85-95 degrees Celsius, thus only two of the recommended secondary antioxidants fall outside of the melting point range claimed in the present application of 180-300 degrees Celsius. Thus it would have been obvious to one of ordinary skill in the art to have included the additive in the polyolefin polymer taught by Yamamoto because Semen teaches it protects the polymer against discoloration and thermooxidative degradation.

**(10) Response to Argument**

1. Applicant argues the art is unpredictable.

Applicant argues that the declaration submitted on March 24 2009 shows the unpredictability of the art. The declaration of March 24, 2009 mainly concerns the melting point temperature of the polyamide in paragraphs 4-10, which is not an issue that is at discussion within this appeal.

Applicant also argues that the examiner provided no citation to evidence to support the disagreement that the art is unpredictable. The declaration lists a series of "unexpected and synergistic effects" of the present invention in paragraph 9 however; provides no factual evidence of these unexpected results. In response to applicant's argument, examiner would like to point to MPEP 716.02 which states,

The evidence relied \*>upon< should establish "that the differences in results are in fact unexpected and unobvious and of both statistical and practical significance." *Ex parte Gelles*, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992) (Mere conclusions in appellants' brief that the claimed polymer had an unexpectedly increased impact strength "are not entitled to the weight of conclusions accompanying the evidence, either in the specification or in a declaration."); *Ex parte C*, 27 USPQ2d 1492 (Bd. Pat. App. & Inter. 1992) (Applicant alleged unexpected results with regard to the claimed soybean plant, however there was no basis for judging the practical significance of data with regard to maturity date, flowering date, flower color, or height of the plant.). See also *In re Nolan*, 553 F.2d 1261, 1267, 193 USPQ 641, 645 (CCPA 1977) and *In re Eli Lilly*, 902 F.2d 943, 14 USPQ2d 1741 (Fed. Cir. 1990) ... "[A]ppellants have the burden of explaining the data in any declaration they proffer as evidence of non-obviousness." *Ex parte Ishizaka*, 24 USPQ2d 1621, 1624 (Bd. Pat. App. & Inter. 1992).

Thus the burden remains on the applicant to provide actual evidence of the unexpected results listed in paragraph 9 of the declaration and the examiner is not required to provide citations to disprove the unfounded arguments of the declaration.

Art Unit: 1791

Furthermore, it is known to use antioxidants in polyolefin and polyamide to stabilize the polymers as shown by Yamamoto on page 2 of applicant's specification and Semen primarily in Col 3 and Col 4 (to be discussed more in depth later). MPEP 2143 states,

[A] person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely that product [was] not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103." *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, \_\_\_, 82 USPQ2d 1385, 1397 (2007).

Thus where it is known to use antioxidants including those as defined by claim 4 the discovery that a specific antioxidant prevents scorching is not necessarily an unexpected result. Especially wherein Table 1 only shows evidence that comparative example 1 does not prevent scorching and it is not recited whether comparative example 2 which also includes an antioxidant causes scorching.

Applicant argues that Semen does not provide a finite number of solutions and that a skilled user would have to try them all. As stated above, only three of the exemplary first antioxidants fall outside of the range claimed in the present application of 70-170 degrees Celsius and only two of the recommended secondary antioxidants fall outside of the melting point range claimed in the present application. Thus it is highly unlikely a skilled artisan would have to try them all. Additionally applicant cites multiple pages of components in the specification similar in number to those recited by semen. It is assumed all of the compounds were found to be successful in the present

Art Unit: 1791

invention and thus a large number of components is obviously not a burden on the applicant.

2. Applicant argues market forces.

Applicant states that the final rejection was based solely on the court's ruling in *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007) and thus market forces must be discussed. This is incorrect the combination of Yamamoto and Semen was based on the motivation that each reference teaches pelletizing a polyolefin/ polyamide polymer including an antioxidant where Semen teaches providing two antioxidants a phenol based and phosphate based antioxidant as a stabilizer and to prevent discoloration and thermooxidative degradation (Semen Col 1; lines 25-36, 60-68 and Col 2; lines 1-8). The rationale based on *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007) is a secondary rationale provided to show additional motivation for why one of ordinary skill in the art at the time of the invention would be motivated to modify the Yamamoto reference to include the antioxidants taught by Semen. Applicant argues that Semen provides a method with great complexity thus increasing the cost and time to carry out manufacturing however examiner notes that Semen recognizes the benefits of including additional antioxidants thus these benefits would be a priority to the cost of additional components to one of ordinary skill in the art.

3. Applicant argues a skilled user would not have looked at the process for manufacturing a different material when the art is unpredictable.



Art Unit: 1791

Applicant argues that Yamamoto teaches a polyolefin-polyamide resin whereas Semen teaches a polyolefin resin and one of ordinary skill in the art would not look to Semen and consider the antioxidants taught in a polyolefin resin in a polyolefin-polyamide resin. Semen specifically teaches using additional polymers including polyamides (Col 17; 25-36, Col 17 62-Col 18; 29, Col 19; line 25-Col 20; line 59). Additionally one of ordinary skill in the art would know that antioxidants are often used to stabilize polymers because they prevent the oxidation reactions taking place among the polymers, thus stabilizing them. Oxidatively sensitive substrates will react with atmospheric oxygen directly and produce free radicals which continue to react with the atmospheric oxygen and antioxidants prevent this. Weathering of polymers can cause this radical initiated auto-oxidation in the same way, which would also be prevented by antioxidants.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Jodi F. Cohen/

Examiner, Art Unit 1791

Conferees:

/Christopher A. Fiorilla/

Art Unit: 1791

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